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Pulpwood Production and Consumption in the Northeast – 2001

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Abstract

This study reports a decrease in pulpwood production by more than 18 percent in the 13 Northeastern states from 1997 to 2001. Pulp production comprised 6.1 million cords of roundwood and almost 1.7 million cords of wood fiber from mill residues. Consumption of pulpwood at mills in the Northeast declined about 7.5 percent during the same period, to 8.8 million cords. Harvesting of trees (roundwood) for pulp was most intense in Maine, where an average 16.6 cubic feet of wood was harvested per acre of timberland in 2001.

The Authors

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Highlights

- Pulpwood production in the Northeast decreased more than 18 percent from 1997 to 2001.
- Pulpwood production in the New England states decreased by less than 1 percent from 1997 to 2001, however if Maine were excluded production would have decreased by nearly one-third.
- Maine's pulpwood production accounted for 54.1 percent of the Northeastern region's total.
- West Virginia's pulpwood production increased by 175.7 percent from 1997 to 2001.
- Pennsylvania and New York's pulpwood production decreased by 21.9 percent and 41.7 percent, respectively.
- Pulpwood imported into the region accounted for 10.8 percent of the total consumption.
- Maine pulpmills consumed nearly 1.1 million more cords than were harvested in the state.
- Harvesting was most intense in Maine, where the pulpwood harvest averaged 16.6 cubic feet per acre of timberland in 2001.

Introduction

This report summarizes data collected from seven engineered wood product (EWP) mills and 24 pulp and paper mills (PPM) operating in the 13-state Northeastern region (Fig. 1) in 2001. The data were obtained by canvassing all PPM and EWP mills in the Northeast that received roundwood and manufacturing residues to produce pulp for paper and a variety of engineered wood products such as oriented strand board or OSB. Roundwood and manufacturing residues shipped outside the Northeast were tracked by exchanging information with other Forest Service Research Stations and from secondary data sources.

The purpose of this report is to estimate roundwood production within the Northeast region. PPM and EWP mills within the region were surveyed to determine the origin of the roundwood and manufacturing residues used in their respective operations. The state of origin may be the state in which the recipient is located, other states within the region, states outside the region, and/or Canada. Using mill receipts to estimate production fails to account for roundwood produced in a state or states in the region that is sent directly to buyers in a state, states outside the region, or in Canada. These shipments are estimated through information collected in TPO assessments conducted by other Forest Service Research Stations and from secondary data as available.

Respondent mills are asked to provide information on all sources, so along with receipts from states within the region, the mill surveys record receipts from states outside the region and Canada.

Estimating Production in 1998, 1999, and 2000

The previous pulpwood survey was conducted in 1997; data were unavailable for the years 1998, 1999, and 2000. We estimated roundwood production and receipts and receipts of manufacturing residues for these years. The estimation procedure relied on actual data from 1997 (the previous survey period) and from 2001 (the current survey period).

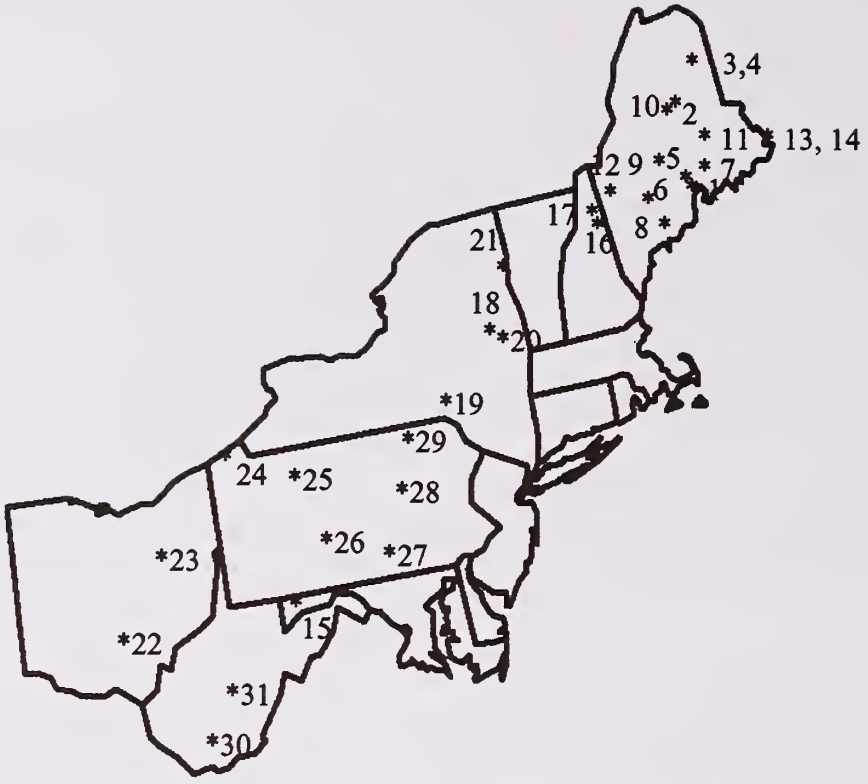
Thirty of the 31 mills surveyed provided information about 2001 receipts by country, state, or county of origin. We estimated 2001 receipts of the nonrespondent mills using Lockwood Post's Directory (2002). Of the 30 mills responding to the survey, 19 provided roundwood receipt estimates for the 1998, 1999, and 2000, as well as actual data from 2001. It was necessary to estimate roundwood receipts for the other 11 mills from their 2001 receipts information only.

Receipts for the missing years were estimated as follows: 2001 roundwood receipts for all mills were summed. A second sum for 2001 was derived for those 19 mills providing data for 1998, 1999, and 2000. Then a ratio was derived by dividing the 2001 total for all mills by the 2001 total for mills providing data for 1998, 1999, and 2000 as well. The sums for 1998, 1999, and 2000 were multiplied by this ratio to derive estimates of total roundwood receipts for these years.

Many mills obtain a portion of their fiber from manufacturing residues or byproducts. Information on manufacturing residues for 1998, 1999, and 2000, were sparse and not reliable, so these also had to be estimated. Estimates were developed from the relationship between roundwood receipts and manufacturing residue receipts in 1997 (the last year in the previous survey) and in 2001. Since ratios differed in the two periods, a graduated scale was developed for estimating the intervening years by apportioning the overall percentage difference equally over the period.

Some mills did not use manufacturing residues in 2001 and it was assumed that these mills used roundwood and roundwood chips only. No attempt was made to develop estimates for manufacturing residues for these mills.

Twenty-seven of the 30 respondents provided receipt information based on green tons. Three mills reported receipts in standard cord equivalents. Thus, we converted green tons into standard cords for 27 respondents and converted standard cords into green tons for three respondents. The mill for which production was

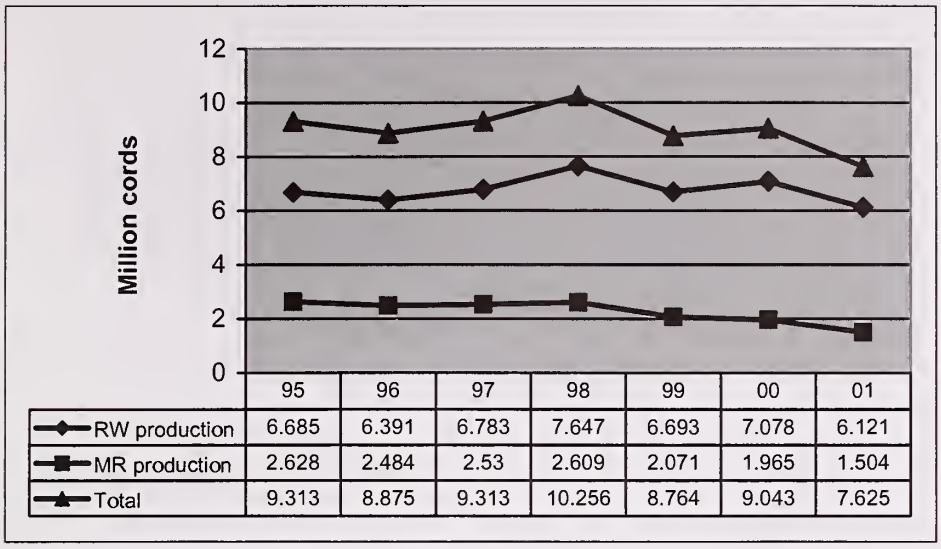


1. Bucksport, ME - International Paper Co.
2. E. Millinocket, ME - Great Northern Paper, Inc.
3. Easton, ME - J M Huber Corp.
4. Easton, ME - Louisiana Pacific, Inc.
5. Hinckley, ME - S.D. Warren
6. Jay, ME– International Paper Co.
7. Lincoln, ME - Lincoln Pulp and Paper Co.
8. Lisbon Falls, ME - Masonite Corp.
9. Madison, ME - Madison Paper Industries
10. Millinocket, ME - Great Northern Paper, Inc.
11. Old Town, ME - Georgia-Pacific Corp.
12. Rumford, ME - Mead Westvaco Papers Group
13. Woodland, ME - Domtar
14. Woodland, ME - Georgia-Pacific Corp.
15. Luke, MD - Westvaco Corp.
16. Berlin, NH - Pulp and Paper of America
17. Groveton, NH - Groveton Paperboard, Inc.
18. Corinth, NY - International Paper Co.
19. Deposit, NY - Norbord Industries
20. Glens Falls, NY - Finch-Pruyn and Company
21. Ticonderoga, NY - International Paper Co.
22. Chillicothe, OH - The Mead Corp.
23. Coshocton, OH - Smurfit-Stone
24. Erie, PA - International Paper Co.
25. Johnsonburg, PA - Willamette Industries, Inc.
26. Roaring Spring, PA - Appleton Papers, Inc.
27. Spring Grove, PA - Glatfelter Pulpwood Co.
28. Sunbury, PA - Knight-Celotex LLC
29. Towanda, PA - Masonite Corp.
30. Mt. Hope, WV - Georgia-Pacific Corp.
31. Sutton, WV - Weyerhaeuser

Figure 1.—Locations and names of mills receiving pulpwood in the Northeastern states, 2001.[1]

estimated using Lockwood Post's Directory (2002) also required conversion of cords to green tons.

The most recent survey report (Widmann and Griffith 1999)[1] provided conversion factors for six species or species groups. We used these same factors to convert current data. The aggregated conversion factors for most respondents differed because each had a unique species mix. Conversions ranged from 0.357 cords per green ton for oak/hickory to 0.556 cords per green ton for spruce-fir. The simple average for all 30 mills was 0.449 cords



	95	96	97	98	99	00	01
RW production	6.685	6.391	6.783	7.647	6.693	7.078	6.121
MR production	2.628	2.484	2.53	2.609	2.071	1.965	1.504
Total	9.313	8.875	9.313	10.256	8.764	9.043	7.625

Figure 2.—Roundwood (RW) and manufacturing residue (MR) production 1995 through 2001.

per green ton. The weighted average was 0.441 cords per green ton.

Because most respondents reported mill receipts in green tons, tables have been prepared using both units, green tons and cords. Where cords are reported, the table is numbered CD1, CD2, etc., where green tons are reported the tables are numbered GT1, GT2, etc.

Production

In 1991, pulpwood production was about 9 million cords and was increasing, according to Widmann and Griffith (1999). Since the mid 1990s, pulpwood production has been cyclical, increasing one year, declining the next, with overall production declining about 3 percent annually since 1995.

In 2001, pulpwood production of roundwood, roundwood chips, and manufacturing residues for the 13 Northeastern states was more than 7.6 million cords (Tables CD1, GT1, Fig. 2), an 18.1 percent decrease from 1997.

The downward trend in the Northeast is more severe than the decline reported for the United States. The Annual Pulpwood Statistics Summary Report 1997-2001, published by the Forest Resources Association Inc. (2001), reports a 5.5 percent decline in pulpwood production nationwide from 1997 to 2001 to the lowest level since 1986.

During 2001, roundwood comprised of 80.3 percent of total production and manufacturing residues 19.7 percent (Tables CD1, GT1, Fig. 2). Roundwood includes bolts, logs, and whole-tree chips generated from harvesting trees. In the Northeast, most of roundwood used for pulp comes from poor quality trees or from the branches and tops of trees harvested for sawlogs. Unlike conditions in the south, the Northeast grows little pulpwood in plantations.

Manufacturing residues are produced when logs are converted into lumber and other products. These residues are usually composed of chips made from sawmill slabs and edgings, veneer cores, and smaller

[1]Six mills listed in the previous report, (Widmann and Griffith 1999) were either closed or had been sold. They are:

S. D. Warren, Westbrook, ME
Champion International, Deferiet, NY
Lyons Falls Pulp and Paper, Lyons Falls, NY
Certainteed Corporation, Milan, OH
Proctor and Gamble, Mehoopany, PA
Jefferson Smurfit, Circleville, OH

Five new facilities, not included in the previous report, are in operation, and are included in Figure 1. They are:

J.M. Huber Corporation, Easton, ME
Louisiana Pacific, Easton, ME
Domtar, Woodland, ME
Georgia Pacific Corporation, Mt. Hope, WV
Weyerhaeuser, Sutton, WV

amounts of chipped pallets. Even some sawdust may find its way into the pulp mills.

Until recently, there have been few alternative markets for the low quality wood used to make pulp. However, in the past decade, several EWP mills have begun operations in the region. These mills prefer the light hardwoods, and usually do not compete substantially with pulp mills whose demands have traditionally focused on the hard hardwoods.

Roundwood

In 2001, 6.1 million cords of roundwood was produced for pulpwood —0.6 million cords below 1997 totals (Tables CD2, GT2). Softwood roundwood production decreased by 485,800 cords, or 19.1 percent, since 1997. The approximate 2 million cords of softwood accounted for 33.6 percent of the total roundwood production. Hardwood roundwood accounted for 66.4 percent in 2001 and decreased by 175,500 cords (4.1 percent) from 1997 to about 4.1 million cords. Maine led the Northeast in total roundwood production with 3.3 million cords; Maine's production was comprised of 1.2 million cords of softwood and 2.1 million cords of hardwood. West Virginia was a distant second with 732,100 cords. Pennsylvania and New York followed with 632,700 and 429,400 cords, respectively (Tables CD6, GT6).

In 2001, roundwood production in New England (Maine, Vermont, New Hampshire, Massachusetts, Rhode Island and Connecticut) comprised 54.8 percent of the Northeast's roundwood total, despite the fact that New England's roundwood production decreased 14.6 percent from 1997 (Tables CD2, GT2) . Hardwood production accounted for 61.6 percent of New England's roundwood production, with the remainder coming from softwood.

Pulpwood from Manufacturing Residues

In 2001, pulpwood chip production in the Northeast from manufacturing residues was more than 1.5 million cords (Tables CD3, GT3); 67.7 percent of these residues were produced from hardwood species (Tables CD3, GT3). Maine had the largest pulpwood chip production from manufacturing residues (446,300 cords), accounting for nearly 30 percent of the region's total (Table 2). In New England, residue use declined 45.2 percent from 1997, with the most significant declines in Vermont (90.4 percent) and Maine (49.5 percent). In Ohio, manufacturing residues accounted for 47.4 percent (297,500 cords) of the pulpwood produced in the state (Tables CD2, GT2).

Consumption

From 1995 to 1997, Northeast pulpwood receipts were relatively stable at 9.5 million cords (Widmann and Griffith 1999). However by 2001, receipts had decreased to 8.8 million cords—a decline of nearly 8 percent (Tables CD4, GT4 and CD5, GT5). Northeast pulpmills received nearly 2.3 million cords of softwood roundwood, 4.6 million cords of hardwood roundwood, and the equivalent of nearly 1.9 million cords of produced from manufacturing residues (Tables CD4, GT4 and CD5, GT5). Pulpwood roundwood imported into the region accounted for 10.8 percent of the receipts (Tables CD14, GT14 and CD16, GT16) and these imports exceeded exports by 1.135 million cords (Tables CD15, GT15). Maine consumed 1.25 million cords more than were produced in state including 599,900 cords of roundwood and the equivalent of 113,200 cords of residue from Canada (Tables CD16, GT16 and CD17, GT17). All of Maine's (612,400 cords) and Vermont's (178,800 cords) roundwood exports out of the region went to Canada. Overall, Canada accounted for 65 percent of the region's total exports of 867,700 cords (Tables CD18, GT18).

Harvesting Intensity

The average annual pulpwood harvest per acre of timberland in 2001 was 6.0 cubic feet, a decrease from the 1997 average of 6.7 cubic feet (Tables CD19, GT19). The greatest harvest rate for the Northeast was reported in Maine and averaged 16.6 cubic feet of roundwood per acre of timberland. Maryland, New Hampshire, and West Virginia averaged 6.2, 5.3, and 5.2 cubic feet per acre, respectively. Rhode Island, Connecticut, and Massachusetts had the lowest harvest rates, with 0.1, 0.2, and 0.5 cubic feet per acre, respectively.

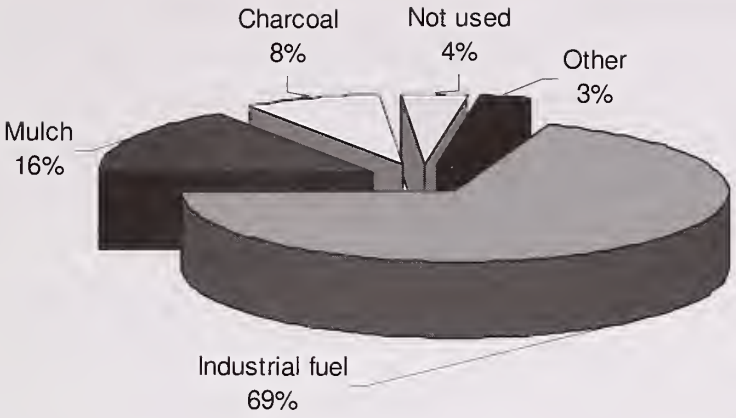


Figure 3.—Hardwood bark use.

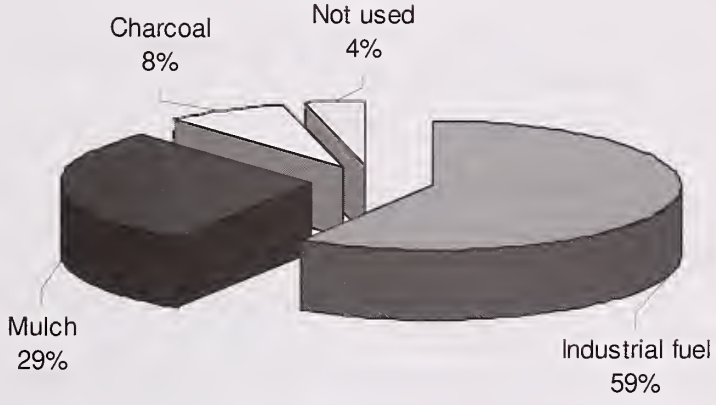


Figure 4.—Softwood bark use.

Bark Residue Utilization

PPM mills collectively produced an estimated 1.47 million tons of bark residue in 2001. The EWP mills combined to produce 0.27 million tons. All seven EWP mills provided information on their bark residue disposal while only 15 of the 23 PPM mills did so. Product distributions for bark use were based on those who responded fully.

PPM mills accounted for 84 percent of the residue and EWP facilities just 16 percent. The bark species mix was two-thirds hardwood and one-third softwood. Industrial fuel accounted for 69 percent of the hardwood bark use followed by mulch and bedding (16 percent), and charcoal production (8 percent). Only 4 percent was reported as not being used (Fig. 3).

Uses of softwood bark were industrial fuel (59 percent), mulch and bedding material (29 percent), and charcoal (8 percent); 4 percent was unused (Fig. 4).

Literature Cited

Lockwood-Post's Directory of the Pulp, Paper and Allied Trades. 2002. New York: Paperloop Publications.

Forest Resources Association, Inc. 2001. **Annual Pulpwood Statistics Summary Report 1997-2001.** Rockville, MD: Forest Resources Association. 38 p.

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APPENDIX

Definition of Terms

Cord – See Standard cord.

Cord equivalent – A unit of measure applied to forms of wood other than roundwood, such as chips, slabs, edgings, and other manufacturing residues, and equal to 85 ft^3 of solid wood, or 1 cord.

Manufacturing residues – Wood materials, such as sawmill slabs and edgings, sawdust, veneer clippings and cores, post and pole trimming, and pulp screening generated from the manufacture of roundwood products.

Pulpwood – Roundwood, whole-tree chips, or manufacturing residues that are used for production of wood pulp.

Pulpwood production – Roundwood and manufacturing plant residues that are used for the production of wood pulp.

Pulpwood receipts – Pulpwood received at wood-pulp mills. These can originate from outside the state or region.

Pulpwood imports – Pulpwood receipts originating from outside the Northeast (13-state region).

Roundwood products – Logs, bolts, total-tree chips, mine timbers, fenceposts, poles, and similar timber products generated by harvesting trees for industrial or consumer use.

Standard cord – A unit of measure for stacked bolts of wood, encompassing 128 ft^3 of wood, bark, and air space. In the Northeast, the measure refers to a stack of wood containing 85 ft^3 or 2.41 m^3, of solid wood. A standard cord commonly used in firewood marketing.

Whole-tree chip – Unbarked wood chips generated from the aboveground portion of a tree, including bolewood, limbs, and leaves.

Conversion Factors

Conversion Factors Used for Green Roundwood

1 ton spruce-fir = 0.5556 cord

1 ton hemlock-tamarack = 0.5000 cord

1 ton pine (New England, New York, and Canada) = 0.5263 cord

1 ton aspen — yellow-poplar = 0.5263 cord

1 ton oak-hickory = 0.3571 cord

1 ton other hardwoods = 0.3846 cord

Conversion Factors Used to Estimate Bark Residue—Hardwood pulpwood

4.0678 tons per Mcf

85 cf per cord

13.1579 cords per Mcf

0.2499 tons per cord

Conversion Factors Used to Estimate Bark Residue—Softwood pulpwood

3.4234 tons per Mcf

85 cf per cord

13.6986 cords per Mcf

0.3092 tons per cord

Conversion Factors Used to Estimate Bark Residue—Hardwood panel products

0.5535 tons per Mbf

2.5 cords per Mbf

0.2214 tons per cord

Conversion Factors Used to Estimate Bark Residue—Softwood panel products

0.4005 tons per Mbf

2.5 cords per Mbf

0.1602 tons per cord

Index to Tables

Table CD1.—Total production of pulpwood in the Northeast, by state and source, 2001

State	Source		Total
	Roundwood	Manufacturing residue	
	Thousand standard cords		
Connecticut	4.0	0.0	4.0
Delaware	*	0.0	*
Maine	3310.2	446.3	3,756.5
Maryland	176.4	75.2	251.6
Massachusetts	18.6	1.4	20.0
New Hampshire	285.8	157.4	443.2
New Jersey	17.2	2.6	19.8
New York	429.4	99.1	528.5
Ohio	329.8	297.5	627.3
Pennsylvania	632.7	264.1	896.8
Rhode Island	0.6	0.0	0.6
Vermont	184.5	8.0	192.5
West Virginia	732.1	152.5	884.6
Total	6,121.4	1,504.1	7,625.5

* less than 50 cords

Table CD2.—Pulpwood production from roundwood in the Northeast by type and state, 2001

State	Type		Total
	Softwood	Hardwood	
	Thousand standard cords		
Connecticut	3.3	0.7	4.0
Delaware	*	*	*
Maine	1,209.0	2,101.2	3,310.2
Maryland	86.0	90.3	176.3
Massachusetts	17.0	1.7	18.7
New Hampshire	133.1	152.7	285.8
New Jersey	16.7	0.5	17.2
New York	203.7	225.7	429.4
Ohio	50.0	279.9	329.9
Pennsylvania	146.1	486.1	632.2
Rhode Island	0.6	0.0	0.6
Vermont	98.9	85.7	184.6
West Virginia	91.7	640.4	732.1
Total	2,056.1	4,064.9	6,121.0

* less than 50 cords

Table CD3.—Softwood and hardwood pulpwood chip production from manufacturing residues in the Northeast, by state and type, 2001

State	Type		Total
	Softwood	Hardwood	
	Thousand standard cords		
Maine	336.4	109.9	446.3
Maryland	41.0	34.1	75.1
Massachusetts	0.3	1.1	1.4
New Hampshire	88.2	69.2	157.4
New Jersey	0.0	2.6	2.6
New York	1.3	97.7	99.0
Ohio	1.5	296.0	297.5
Pennsylvania	8.2	255.9	264.1
Vermont	6.2	1.8	8.0
West Virginia	2.4	150.1	152.5
Total	485.5	1,018.4	1,503.9

Table CD4.—Pulpwood receipts from roundwood in the Northeast, by state and type, 2001

State	Type		Total
	Softwood	Hardwood	
	Thousand standard cords		
Maine/New Hampshire[a]	1,506.1	2,865.2	4,371.3
Maryland/West Virginia[a]	136.8	783.0	919.8
New York	267.0	218.1	485.1
Ohio	73.8	301.6	375.4
Pennsylvania	287.0	470.0	757.0
Total	2,270.7	4,637.9	6,908.6

[a]States have been combined to avoid individual disclosure.

Table CD5.—Pulpwood chip receipts from manufacturing residues in the Northeast, by state and type, 2001

State	Type		Total
	Softwood	Hardwood	
	Thousand standard cords		
Maine/New Hampshire[a]	483.1	227.1	710.2
Maryland/West Virginia[a]	9.9	111.0	120.9
New York	1.4	81.6	83.0
Ohio	4.8	392.9	397.7
Pennsylvania	42.7	308.7	351.4
Total	514.9	1,121.3	1,663.2

[a]States have been combined to avoid individual disclosure.

Table CD6.—Pulpwood production from roundwood in the Northeast, by state and type, 2001

State	Softwood					Total hardwoods	Total
	Spruce/fir	Hemlock/ Tamarack	Mixed softwoods	Pine	Total softwoods		
	Thousand standard cords						
Connecticut	*	3.3	0.0	*	3.3	0.7	4.0
Delaware	0.0	0.0	0.0	*	0.0	*	*
Maine	600.9	312.3	22.8	272.8	1,208.8	2,101.2	3,310.1
Maryland	0.0	0.0	16.2	69.9	86.1	90.3	176.4
Massachusetts	0.2	8.3	*	8.5	17.0	1.7	18.7
New Hampshire	55.7	21.9	2.8	52.7	133.1	152.7	285.8
New Jersey	0.0	0.0	0.0	16.7	16.7	0.5	17.2
New York	6.7	90.5	9.7	96.9	203.8	225.7	429.4
Ohio	0.0	0.0	5.3	44.7	50.0	279.9	329.9
Pennsylvania	0.0	21.3	26.9	97.9	146.1	486.4	632.7
Rhode Island	*	0.0	0.0	*	0.6	0.0	0.6
Vermont	28.2	22.2	2.8	45.7	98.9	85.7	184.5
West Virginia	0.0	0.0	49.7	42.0	91.7	640.4	732.1
Total	691.7	479.7	136.1	747.7	2,056.1	4,065.2	6,121.4

* less than 50 cords

Table CD7.—Pulpwood production from roundwood in Northern New England, by county, state, and type, 2001

County	Softwood					Total hardwoods	Total all species
	Spruce/fir	Hemlock/ Tamarack	Pine	Mixed softwoods	Total softwoods		
MAINE	Thousand standard cords						
Androscoggin	1.4	5.1	16.4	0.8	23.6	25.5	49.1
Aroostock	29.2	12.6	0.5	0.8	42.3	329.3	371.6
Cumberland	1.1	13.8	25.8	2.0	42.5	8.4	50.9
Franklin	40.9	17.8	9.7	1.6	68.0	115.3	183.3
Hancock	13.3	5.0	5.8	1.4	23.6	76.7	100.3
Kennebec	4.0	13.6	23.2	2.3	42.2	26.1	68.3
Knox	2.2	1.3	2.7	0.2	6.1	3.0	9.1
Lincoln	2.9	2.1	10.6	0.7	15.1	5.2	20.3
Oxford	45.8	46.9	100.8	2.7	196.0	159.8	355.8
Penobscot	64.1	27.9	12.6	3.5	101.5	304.9	406.4
Piscataquis	52.1	9.1	2.5	1.0	52.0	182.1	234.1
Sagadahoc	0.3	1.0	3.7	0.2	5.0	2.2	7.2
Somerset	83.9	28.2	12.3	1.3	107.2	92.8	200.0
Waldo	7.5	4.6	16.4	0.5	25.7	8.6	34.3
Washington	41.9	6.3	4.4	2.4	49.3	163.4	212.7
York	0.1	6.3	22.4	1.2	30.0	2.7	32.7
Unknown	210.3	110.8	3.0	0.0	324.1	80.5	404.6
Total	601.0	312.4	272.8	22.6	1,208.8	2,101.3	3,310.1
NEW HAMPSHIRE							
Belknap	0.0	*	0.6	*	0.6	3.2	3.8
Carroll	*	2.8	2.4	0.4	5.7	*	5.7
Cheshire	*	0.7	0.8	*	1.5	*	1.5
Coos	14.3	*	0.7	0.8	15.8	55.3	71.1
Grafton	0.9	0.6	1.6	0.3	3.4	2.2	5.7
Hillsborough	0.0	*	1.1	*	1.1	*	1.1
Merrimack	*	7.5	5.4	0.3	13.1	1.2	14.3
Rockingham	*	0.6	4.7	0.6	6	1.3	7.3
Stafford	*	*	3.2	*	3.2	*	3.2
Sullivan	*	0.7	20.6	0.3	21.6	2.3	23.9
Unknown	39.9	8.3	11.7	0.0	59.9	86	145.8
Total	55.1	21.2	52.8	2.7	131.9	151.5	283.4
VERMONT							
Addison	0.0	0.2	2.7	0.0	2.9	0.3	3.2
Bennington	*	0.2	1.8	0.0	2.0	4.1	6.1
Caledonia	4.3	0.5	4.8	0.6	10.2	2.7	12.9
Chittenden	*	0.2	0.5	0.0	0.7	0.3	1.0
Essex	3.2	0.4	0.4	0.2	4.2	27.7	31.9
Franklin	0.1	2.8	3.6	0.0	6.6	0.7	7.3
Grand Isle	0.0	0.0	*	0.0	0.0	0.0	0.0
Lamoille	0.5	1.4	1.8	0.2	3.9	1.3	5.2
Orange	0.6	1.9	3.3	1.0	6.8	0.9	7.7
Orleans	4.2	4.9	1.5	0.2	10.8	3.1	14.0
Rutland	*	1.0	6.5	*	7.5	1.0	8.6
Washington	0.7	0.5	3.4	0.5	5.1	0.9	6.0
Windham	0.1	0.8	4.0	0.0	4.9	0.8	5.7
Windsor	0.1	1.1	2.8	0.1	4.1	0.1	4.2
Unknown	14.4	6.4	8.3	0.0	29.1	41.6	70.8
Total	28.1	22.3	45.6	2.8	98.8	85.7	184.5

* less than 125 green tons. Counties with no reported production are not listed.

Table CD8.—Pulpwood production from roundwood in southern New England, by state, county and type, 2001

County	Softwood					Total hardwoods	Total all species
	Spruce/fir	Hemlock/ Tamarack	Pine	Mixed softwoods	Total softwoods		
CONNECTICUT	Thousand standard cords						
Fairfield	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hartford	0.0	1.3	0.0	0.0	1.3	0.0	1.3
Litchfield	0.0	0.1	0.0	0.0	0.1	0.0	0.1
New Haven	0.0	0.1	0.0	0.0	0.1	0.0	0.1
Tolland	0.0	0.1	0.0	0.0	0.1	0.0	0.1
Windham	0.0	0.1	0.0	0.0	0.1	0.0	0.1
New London	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown	*	1.6	*	0.0	1.6	0.7	2.3
Total	*	3.3	*	0.0	3.3	0.7	4.0
MASSACHUSETTS							
Berkshire	0.0	0.6	*	0.0	0.6	0.3	0.9
Essex	0.0	0.0	*	0.0	*	*	*
Franklin	0.0	0.4	0.0	0.0	0.4	*	0.4
Hampden	0.0	4.1	0.0	0.0	4.1	*	4.1
Worchester	*	0.3	8.0	*	8.3	1.0	9.3
Unknown	0.1	2.9	0.4	0.0	3.4	0.4	3.8
Total	0.1	8.3	8.4	0.0	16.8	1.7	18.5
RHODE ISLAND							
Unknown	*	0.0	0.5	0.0	0.5	*	0.5
Total	*	0.0	0.5	0.0	0.5	*	0.6

* less than 50 cords. Counties with no reported production are not listed.

Table CD9.—Pulpwood production from roundwood in New York, by county and type, 2001

County	Softwood					Total hardwoods	Total all species
	Spruce/fir	Hemlock/ Tamarack	Pine	Mixed softwoods	Total softwoods		
	Thousand standard cords						
Albany	0.0	0.2	0.7	0.0	0.9	0.2	1.1
Allegheny	0.0	0.0	0.0	1.4	1.4	0.0	1.4
Broome	*	1.3	4.5	0.0	5.8	1.0	6.7
Cattaraugus	0.0	0.0	0.0	8.3	8.3	3.8	12.1
Chautauqua	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Chemung	0.0	0.4	1.1	0.0	1.5	0.8	2.3
Chenango	0.1	2.0	*	0.0	2.2	0.0	2.2
Clinton	0.0	2.3	5.3	0.0	7.6	13.0	20.7
Columbia	0.0	0.1	*	0.0	0.1	0.2	0.2
Cortland	0.0	*	0.0	0.0	0.0	0.6	0.6
Delaware	0.0	1.6	0.7	0.0	2.3	11.3	13.7
Dutchess	*	0.0	0.0	0.0	0.0	0.0	*
Essex	2.9	13.2	16.7	0.0	32.9	28.6	61.4
Franklin	0.4	3.9	7.8	0.0	12.1	21.1	33.2
Fulton	0.1	7.5	6.3	0.0	13.9	5.5	19.4
Greene	0.0	0.5	0.3	0.0	0.8	0.1	0.9
Hamilton	1.0	2.9	0.5	0.0	4.4	19.0	23.3
Herkimer	0.2	2.2	1.0	0.0	3.3	2.8	6.1
Jefferson	*	1.5	0.2	0.0	1.8	0.1	1.9
Lewis	0.4	4.6	0.9	0.0	5.8	1.4	7.2
Madison	0.0	0.1	0.0	0.0	0.1	0.0	0.1
Monroe	0.0	0.1	0.3	0.0	0.3	0.1	0.4
Montgomery	0.0	0.1	0.0	0.0	0.1	0.2	0.2
Oneida	*	1.0	0.2	0.0	1.1	2.2	3.3
Onondaga	0.0	0.1	0.0	0.0	0.1	0.0	0.1
Oswego	*	6.1	0.1	0.0	6.2	0.0	6.2
Otsego	0.1	1.4	0.6	0.0	2.1	0.2	2.3
Rensselaer	0.2	3.2	7.5	0.0	10.9	8.2	19.1
Rockland	0.0	*	0.0	0.0	0.0	0.0	*
Saratoga	0.2	6.3	15.6	0.0	22.1	17.9	40.0
Schenectady	0.0	0.0	*	0.0	0.0	0.0	*
Schohairie	0.0	0.9	0.1	0.0	1.1	0.0	1.1
St.Lawrence	0.5	9.2	6.1	0.0	15.8	62.5	78.2
Steuben	0.0	1.5	1.1	0.0	2.7	0.4	3.1
Sullivan	0.0	0.7	0.0	0.0	0.7	0.0	0.7
Tioga	0.0	0.0	0.1	0.0	0.1	1.3	1.4
Tompkins	0.0	0.0	3.9	0.0	3.9	0.0	3.9
Ulster	0.0	0.2	0.0	0.0	0.2	0.0	0.2
Warren	0.5	8.1	10.9	0.0	19.5	10.7	30.2
Washington	0.0	7.5	4.2	0.0	11.6	9.9	21.6
Wayne	0.0	0.0	0.0	0.0	0.0	0.7	0.7
Unknown	0.0	0.0	0.1	0.0	0.1	0.8	0.9
Total	6.7	90.4	96.8	9.7	203.5	225.5	429.4

* less than 50 cords. Counties with no reported production are not listed.

Table CD10.—Pulpwood production from roundwood in Delaware, Maryland, and New Jersey, by county and type, 2001

County	Softwood			Total hardwoods	Total all species
	Pine	Mixed softwoods	Total softwood		
DELAWARE	Thousand standard cords				
Kent	*	0.0	*	*	*
New Castle	0.0	0.0	0.0	*	*
Unknown	0.0	0.0	0.0	*	*
Total	0.0	0.0	*	*	*
MARYLAND					
Allegheny	0.7	0.9	1.5	20.1	21.6
Anne Arundel	3.0	*	3.0	5.3	8.3
Baltimore	0.4	*	0.4	5.4	5.9
Calvert	0.4	0.5	0.8	0.7	1.5
Carroll	0.4	0.0	0.4	1.2	1.6
Cecil	0.1	0.6	0.7	0.1	0.8
Charles	8.7	0.0	8.7	2.8	11.5
Dorchester	0.0	0.3	0.3	1.2	1.5
Frederick	1.1	0.0	1.1	6.9	8.0
Garrett	0.0	3.0	3.0	33.0	36.0
Harford	0.1	0.0	0.1	1.0	1.1
Howard	0.2	0.0	0.2	0.6	0.8
Montgomery	0.1	0.0	0.1	0.6	0.6
Prince Georges	0.2	0.0	0.2	0.8	1.0
Queen Annes	*	0.0	0.0	*	0.0
St. Marys	6.2	9.3	15.6	4.1	19.7
Washington	0.0	1.5	1.5	1.8	3.3
Wicomico	48.3	0.0	48.3	4.3	52.6
Unknown	0.0	0.0	*	*	0.0
Total	69.9	16.1	86.0	89.9	175.9
NEW JERSEY					
Atlantic	1.2	0.0	1.2	*	1.2
Camden	6.6	0.0	6.6	*	7.1
Cape May	0.4	0.0	0.4	0.0	0.4
Gloucester	0.1	0.0	0.1	0.0	0.1
Mercer	0.1	0.0	0.1	0.0	0.1
Ocean	6.1	0.0	6.1	0.0	6.1
Warren	2.2	0.0	2.2	0.0	2.2
Total	16.7	0.0	16.7	*	17.2

* less than 50 cords. Counties with no reported production are not listed.

Table CD11.—Pulpwood production from roundwood in Pennsylvania, by county and type, 2001

County	Softwood				Total hardwoods	Total all species
	Hemlock/ Tamarack	Pine	Mixed softwoods	Total softwoods		
	Thousand standard cords					
Adams	0.0	3.4	0.5	3.9	6.7	10.6
Allegheny	0.0	0.0	0.0	0.0	5.5	5.5
Bedford	0.0	2.4	5.3	7.7	16.4	24.1
Berks	0.0	1.0	0.0	1.0	3.0	4.0
Blair	0.0	0.1	1.2	1.3	2.4	3.7
Bradford	0.4	0.7	0.0	1.1	2.3	3.4
Bucks	0.0	*	0.0	0.0	0.0	0.0
Cambria	1.0	1.1	1.1	3.2	3.8	6.9
Cameron	0.4	0.3	0.0	0.7	0.0	0.7
Carbon	0.0	0.1	0.0	0.1	0.1	0.2
Centre	0.5	1.9	0.1	2.6	6.1	8.7
Chester	0.0	0.2	0.0	0.2	1.2	1.4
Clearfield	3.9	5.1	4.2	13.2	33.3	46.5
Clinton	0.4	1.2	0.2	1.8	1.4	3.2
Columbia	0.0	0.6	0.0	0.6	1.1	1.6
Crawford	0.0	0.0	0.0	0.0	26.9	26.9
Cumberland	0.0	0.8	0.0	0.8	2.4	3.2
Dauphin	0.0	1.0	0.0	1.0	8.0	9.0
Delaware	0.0	0.1	0.0	0.1	0.4	0.6
Elk	1.9	1.8	0.0	3.7	22.6	26.2
Erie	0.0	0.0	0.0	0.0	0.1	0.1
Fayette	0.0	*	0.0	0.0	4.2	4.2
Forest	1.2	0.8	0.0	2.0	18.9	20.9
Franklin	0.0	1.0	0.0	1.0	9.7	10.7
Fulton	0.0	5.4	3.4	8.8	7.0	15.7
Greene	0.0	*	0.0	0.0	4.9	4.9
Huntington	0.0	8.3	0.5	8.8	14.7	23.6
Indiana	0.5	0.5	2.4	3.4	4.4	7.8
Jefferson	3.4	2.9	1.0	7.3	9.9	17.3
Juniata	0.0	6.5	0.0	6.5	5.6	12.1
Lackawanna	0.2	*	0.0	0.2	5.6	5.7
Lancaster	0.0	*	0.0	0.0	1.3	1.3
Lawrence	0.0	0.0	0.0	0.0	0.3	0.3
Lebanon	0.0	0.1	0.0	0.1	1.3	1.4
Lehigh	0.0	0.0	0.0	0.0	1.5	1.5
Luzerine	0.3	1.0	0.0	1.2	1.2	2.4
Lycoming	0.6	3.8	0.0	4.4	2.8	7.2
McKean	0.4	0.3	0.0	0.7	18.9	19.6
Mercer	0.0	2.5	0.2	2.7	7.3	9.9
Mifflin	0.0	0.9	0.0	0.9	7.6	8.5
Monroe	0.0	0.0	0.0	0.0	1.0	1.0
Montgomery	0.0	*	0.0	0.0	0.0	0.0
Montour	0.0	1.1	0.0	1.1	0.0	1.1
Northcumberland	0.0	0.2	0.0	0.2	2.5	2.7

Continued

Table CD11.—continued

County	Softwood				Total hardwoods	Total all species
	Hemlock/ Tamarack	Pine	Mixed softwoods	Total softwoods		
	Thousand standard cords					
Perry	0.0	3.9	0.0	3.9	1.1	5.0
Pike	0.0	0.1	0.0	0.1	0.9	1.0
Potter	0.0	0.0	0.0	0.0	5.6	5.6
Schuylkill	0.0	1.9	0.0	1.9	34.5	36.3
Snyder	0.0	0.4	0.0	0.4	1.5	2.0
Somerset	0.0	0.4	0.8	1.2	28.0	29.2
Sullivan	0.6	6.9	0.0	7.5	10.1	17.6
Susquehanna	0.4	0.3	0.0	0.7	2.3	3.0
Tioga	0.0	3.3	0.0	3.4	8.8	12.2
Union	0.0	0.7	0.0	0.7	0.3	1.0
Warren	0.4	0.3	0.0	0.7	6.4	7.1
Washington	0.0	*	1.0	1.0	3.0	4.0
Wayne	0.8	*	0.0	0.8	4.7	5.5
Westmoreland	0.0	0.0	0.0	0.0	3.1	3.1
Wyoming	0.3	2.3	0.0	2.6	6.2	8.8
York	0.0	2.2	0.0	2.2	6.7	8.9
Unknown	3.9	18.0	4.9	26.8	89.1	115.9
Total	21.5	97.8	27.8	147.1	485.7	632.8

* less than 50 cords. Counties with no reported production are not listed.

Table CD12.—Pulpwood production from roundwood in West Virginia, by county and type, 2001

County	Softwood			Total hardwoods	Total all species
	Pine	Mixed softwoods	Total softwoods		
	Thousand standard cords				
Barbour	*	*	*	12.2	12.2
Berkeley	0.0	2.7	2.7	5.3	8.0
Boone	0.8	0.0	0.8	6.5	7.3
Braxton	0.3	0.0	0.3	5.3	5.6
Cabell	0.9	0.1	1.0	0.9	1.9
Calhoun	0.8	0.0	0.8	3.2	3.9
Clay	0.0	0.0	0.0	3.8	3.8
Doddridge	0.8	0.0	0.8	6.9	7.7
Fayette	0.0	0.0	0.0	1.5	1.5
Gilmer	0.0	0.0	0.0	2.3	2.3
Grant	0.2	0.3	0.5	13.7	14.2
Greenbrier	0.0	0.0	0.0	2.3	2.3
Hampshire	0.0	9.1	9.1	14.6	23.7
Hancock	0.0	0.0	0.0	2.6	2.6
Hardy	0.0	6.5	6.5	12.9	19.4
Harrison	*	0.0	*	9.9	9.9
Jackson	2.5	2.6	5.1	2.3	7.4
Kanawha	1.1	*	1.1	3.9	5.0
Lewis	0.4	0.0	0.4	11.3	11.7
Lincoln	0.9	0.0	0.9	3.1	4.0
Logan	0.0	0.0	0.0	4.4	4.4
Marion	*	*	*	12.3	12.3
Marshall	0.0	0.0	0.0	0.6	0.6
Mason	2.9	1.5	4.4	3.8	8.3
McDowell	0.0	0.0	0.0	2.2	2.2
Mineral	0.0	3.4	3.4	14.0	17.4
Mingo	0.0	0.0	0.0	*	*
Monongalia	0.1	0.0	0.1	12.2	12.3
Morgan	0.0	5.1	5.1	6.8	11.9
Nicholas	0.8	0.0	0.8	10.9	11.7
Ohio	0.0	0.0	0.0	3.4	3.4
Pendleton	0.0	0.1	0.1	2.6	2.7
Pleasant	*	1.1	1.1	0.7	1.8
Pocahontas	0.3	0.0	0.3	11.5	11.8
Preston	0.6	0.4	1.0	30.1	31.0
Putnam	3.9	1.2	5.1	4.8	9.9
Raleigh	0.0	0.0	0.0	3.4	3.4
Randolph	0.2	1.5	1.7	62.2	63.8
Roane	0.2	*	0.2	1.5	1.7
Taylor	0.4	0.0	0.4	4.3	4.7
Tucker	0.0	0.1	0.1	18.2	18.3
Tyler	0.4	0.0	0.4	2.1	2.5
Upshur	*	0.0	*	15.8	15.8
Wayne	0.0	0.0	0.0	*	*
Webster	0.4	0.0	0.4	15.1	15.5
Wetzel	0.0	0.0	0.0	5.0	5.0
Wirt	1.1	5.2	6.3	3.8	10.1
Wood	3.0	4.9	7.8	3.0	10.8
Wyoming	0.0	0.0	0.0	0.4	0.4
Unknown	15.8	0.0	15.8	253.2	269.0
Total	41.8	49.6	91.4	640.5	731.9

* less than 50 cords. Counties with no reported production are not listed.

Table CD13.—Pulpwood production from roundwood in Ohio, by county and type, 2001

County	Softwood			Total hardwoods	Total all species
	Pine	Mixed softwoods	Total softwoods		
	Thousand standard cords				
Adams	0.2	0.0	0.2	1.9	2.1
Ashland	0.0	0.0	0.0	1.0	1.0
Ashtabula	0.0	0.0	0.0	0.1	0.1
Athens	0.3	0.0	0.3	1.7	2.0
Belmont	2.7	0.0	2.7	8.1	10.9
Carroll	0.4	0.0	0.4	1.3	1.7
Clermont	0.2	0.0	0.2	0.9	1.1
Clinton	0.2	0.0	0.2	0.8	1.0
Columbiana	0.0	0.0	0.0	0.2	0.2
Coshocton	3.4	0.0	3.4	8.1	11.4
Cuyahoga	0.0	0.0	0.0	9.1	9.1
Delaware	0.0	0.0	0.0	0.5	0.5
Erie	0.0	0.0	0.0	0.1	0.1
Fairfield	0.2	0.0	0.2	1.8	2.0
Franklin	0.0	0.0	0.0	2.7	2.7
Fulton	5.3	0.0	5.3	0.8	6.1
Gallia	2.4	1.3	3.7	8.6	12.3
Geauga	0.0	0.0	0.0	1.8	1.8
Guernsey	0.0	0.0	0.0	3.4	3.4
Hamilton	0.2	0.0	0.2	1.9	2.1
Hardin	0.0	0.0	0.0	*	*
Harrison	0.4	0.0	0.4	4.9	5.3
Highland	0.3	0.0	0.3	2.9	3.2
Hocking	1.0	0.0	1.0	5.2	6.3
Holmes	0.0	0.0	0.0	0.3	0.3
Huron	0.0	0.0	0.0	1.9	1.9
Jackson	4.3	0.0	4.3	28.8	33.1
Jefferson	0.0	0.0	0.0	0.9	0.9
Knox	0.0	0.0	0.0	*	*
Lake	0.0	0.0	0.0	3.0	3.0
Lawrence	1.6	0.0	1.6	14.4	16.0
Licking	4.3	0.0	4.3	1.9	6.2
Lorain	0.0	0.0	0.0	3.3	3.3
Lucas	0.0	0.0	0.0	0.5	0.5
Madison	0.2	0.0	0.2	0.8	1.0
Mahoning	0.0	0.0	0.0	0.8	0.8
Medina	0.0	0.0	0.0	4.1	4.1
Meigs	0.4	3.7	4.1	5.2	9.3
Monroe	0.0	0.0	0.0	*	*
Montgomery	0.2	0.0	0.2	1.9	2.1
Morgan	0.5	0.0	0.5	1.6	2.1
Morrow	0.0	0.0	0.0	0.1	0.1
Muskingum	1.9	0.0	1.9	0.3	2.2
Noble	0.0	0.0	0.0	6.7	6.7

Continued

Table CD13.—Continued

County	Softwood			Total hardwoods	Total all species
	Pine	Mixed softwoods	Total softwoods		
	Thousand standard cords				
Perry	0.3	0.0	0.3	3.8	4.2
Pickaway	0.3	0.0	0.3	5.6	5.9
Pike	2.4	0.0	2.4	17.7	20.1
Portage	0.0	0.0	0.0	1.9	1.9
Richland	0.0	0.0	0.0	0.6	0.6
Ross	0.4	0.0	0.4	18.0	18.3
Sandusky	0.0	0.0	0.0	*	*
Scioto	2.7	0.1	2.8	19.8	22.6
Stark	0.0	0.0	0.0	4.9	4.9
Summit	0.4	0.0	0.4	5.6	6.1
Trumbull	0.0	0.0	0.0	10.8	10.8
Tuscarawas	0.4	0.0	0.4	8.7	9.1
Vinton	2.8	*	2.8	18.3	21.0
Warren	0.6	0.0	0.6	1.7	2.2
Washington	3.8	0.1	3.9	4.3	8.2
Wayne	0.0	0.0	0.0	1.5	1.5
Unknown	0.0	0.1	0.1	12.3	12.4
Total	44.7	5.3	50.0	279.8	329.8

* less than 50 cords. Counties with no reported production are not listed.

Table CD14.—Production and receipts of roundwood in the Northeast, by state and type, 2001

State	Produced in State		Received in State	
	Softwood	Hardwood	Softwood	Hardwood
	Thousand standard cords			
Connecticut	3.3	0.7	0.0	0.0
Delaware	*	*	0.0	0.0
Maine	1,208.8	2,101.3	1,479.9	2,708.3
Maryland	86.0	90.3	102.7	231.2
Massachusetts	17.0	1.7	0.0	0.0
New Hampshire	133.1	152.7	26.2	156.9
New Jersey	16.7	0.5	0.0	0.0
New York	203.7	225.7	267.0	218.1
Ohio	50.0	279.8	73.8	301.6
Pennsylvania	146.0	486.7	287.0	470.0
Rhode Island	0.6	0.0	0.0	0.0
Vermont	98.9	85.7	0.0	0.0
West Virginia	91.7	640.4	34.1	551.8
Totals	2,055.9	4,065.4	2,270.7	4,637.9

* less than 50 cords

Table CD15.—Balance of pulpwood roundwood and residue shipments into and out of states, 2001

State	Production	Receipts	Net [a]
	Thousand standard cords		
Connecticut	4.0	0.0	4.0
Delaware	*	0.0	*
Maine	3,756.5	5,011.7	-1,255.2
Maryland	251.5	451.7	-200.2
Massachusetts	20.0	0.0	20.0
New Hampshire	443.2	240.5	202.7
New Jersey	19.8	0.0	19.8
New York	528.5	568.2	-39.8
Ohio	627.3	791.0	-163.7
Pennsylvania	896.8	1,108.5	-211.7
Rhode Island	0.6	0.0	0.6
Vermont	192.5	0.0	192.5
West Virginia	884.6	589.0	295.6
Total	7,625.3	8,760.6	-1,135.3

*less than 50 cords

[a]negative values indicate a net importing state, positive values a net exporting state

Table CD16.—Imports of roundwood into the Northeast, by state (or province) of origin, state of consumption, and type, 2001

Receiving state	State/province of origin	Softwood					Hardwood				Total imports
		Hemlock & Tamarack	Mixed softwoods	Pine	Spruce & Fir	Softwood totals	Aspen & Yellow-Poplar	Oak & Hickory	Other hardwoods	Hardwood totals	
		Thousand standard cords									
Maine	Canada	13.9	0.2	0.2	94.8	109.1	275.5	0.0	215.3	490.8	599.9
New York	Canada	15.7	0.0	3.1	0.2	19.0	0.0	0.0	0.4	0.4	19.4
Ohio	Kentucky	0.0	0.0	15.5	0.0	15.5	0.0	0.0	24.4	24.4	39.8
Pennsylvania	Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	4.5
	Virginia	0.0	0.0	54.5	0.0	54.6	0.0	5.0	0.1	5.2	59.8
West Virginia	Kentucky	0.0	0.0	0.5	0.0	0.5	0.0	0.0	6.9	6.9	7.5
	Virginia	0.0	0.0	1.6	0.0	1.6	0.0	0.0	12.5	12.5	14.2
Total		29.6	0.2	75.5	95.0	200.3	275.5	5.0	264.1	544.6	745.0

Table CD17.—Sources of imports of manufacturing residues, by state and type, 2001

To	From	Type								Total
		Softwood				Hardwood				
		Chips	Sawdust	Other	Total	Chips	Sawdust	Other	Total	
		Thousand standard cords								
Maine	New Brunswick	0.0	0.0	0.0	0.0	35.2	0.0	0.1	35.3	35.3
	Quebec	21.8	0.0	0.0	21.8	10.2	0.0	0.0	10.2	32.0
	Canada	0.0	32.0	0.0	30.2	1.6	0.0	0.0	1.6	31.8
New York	Canada	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
Ohio	Indiana	0.0	0.0	0.0	0.0	4.9	0.0	0.0	4.9	4.9
	Kentucky	2.5	21.3	0.0	23.8	27.0	22.9	0.0	28.6	52.4
	Tennessee	0.7	0.0	0.0	0.7	0.0	0.0	0.0		0.7
Pennsylvania	Canada	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.2
	Virginia	1.1	0.0	0.0	1.1	8.5	0.0	0.0	8.5	9.6
Total		26.3	30.2	0.0	77.8	87.6	22.9	0.1	89.3	167.1

Table CD18.—Exports from the Northeastern region by state to other states and Canada, 2001

From	To							
	Alabama		Kentucky		Louisiana		North Carolina	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Thousand standard cords							
Massachusetts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maryland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Hampshire	0.0	10.4	0.0	0.0	0.0	0.0	0.0	0.0
New Jersey	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0
New York	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ohio	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.0
Pennsylvania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rhode Island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vermont	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
West Virginia	0.0	0.0	0.0	0.8	0.0	0.0	0.0	152.3
Total	0.0	10.4	0.0	6.6	0.0	13.2	0.0	152.3

Table CD18 (continued). —Exports from the Northeastern region by state to other states and Canada, 2001

From	To							
	South Carolina		Virginia		Canada		Total	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Thousand standard cords							
Massachusetts	0.0	0.0	0.0	0.0	1.4	0.0	1.4	0.0
Maryland	0.0	0.0	19.3	35.4	0.0	0.0	19.3	35.4
Maine	0.0	0.0	0.0	0.0	555.6	56.8	555.6	56.8
New Hampshire	0.0	33.6	0.0	0.0	8.4	0.4	8.4	44.4
New Jersey	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2
New York	0.0	0.0	0.0	0.0	28.5	35.7	28.5	35.7
Ohio	0.0	0.0	0.0	25.2	0.0	0.0	0.0	31.0
Pennsylvania	0.0	0.0	0.0	0.0	0.9	0.6	0.9	0.6
Rhode Island	0.0	0.0	0.0	0.0	*	0.0	0.0	0.0
Vermont	0.0	0.0	0.0	0.0	77.9	100.9	77.9	100.9
West Virginia	0.0	0.0	4.0	156.2	*	0.6	4.0	309.9
Total	0.0	33.6	23.3	216.8	672.7	195.0	696.0	627.9

* less than 50 cords. States with no exports are not listed.

Table CD19.—Estimated average annual pulpwood roundwood removals per acre of timberland in the Northeast, 2001

State	Acres of timberland (Thousand acres)	Pulpwood harvest (Thousand cords)	Removals/acre[a] (Cubic feet)
Connecticut	1,815	4.0	0.2
Delaware	376	*	**
Maine	16,952	3,310.2	16.6
Maryland	2,423	176.4	6.2
Massachusetts	2,965	18.7	0.5
New Hampshire	4,551	285.8	5.3
New Jersey	1,864	17.2	0.8
New York	15,406	429.4	2.4
Ohio	7,568	329.8	3.7
Pennsylvania	15,853	632.7	3.4
Rhode Island	356	0.6	0.1
Vermont	4,461	184.5	3.5
West Virginia	11,900	732.1	5.2
Total	86,491	6,121.4	6.0

[a]Conversion from cords to cubic feet assumes 85 cubic feet per cord
*less than 50 cords
**less than 0.05 cubic feet/acre

Table GT1.—Total production of pulpwood in the Northeast, by state and source, 2001

State	Source		Total
	Roundwood	Manufacturing residue	
	Thousand green tons		
Connecticut	8.5	0.0	8.5
Delaware	*	0.0	*
Maine	7,478.1	1,115.8	8,593.9
Maryland	402.2	187.9	590.1
Massachusetts	37.4	3.3	40.7
New Hampshire	639.6	393.4	1,033.0
New Jersey	33.1	6.4	39.5
New York	978.6	247.5	1,226.1
Ohio	822.7	743.7	1,566.4
Pennsylvania	1,552.5	660.2	2,212.7
Rhode Island	1.1	0.0	1.1
Vermont	402.6	20.1	422.6
West Virginia	1,750.9	381.3	2,132.2
Total	14,107.2	3,759.6	17,866.8

* less than 125 green tons

Table GT2.—Pulpwood production from roundwood in the Northeast, by type and state, 2001

State	Type		Total
	Softwood	Hardwood	
	Thousand green tons		
Connecticut	6.6	1.9	8.5
Delaware	*	*	*
Maine	2,267.9	5,210.2	7,478.1
Maryland	163.5	238.7	402.2
Massachusetts	33.1	4.3	37.4
New Hampshire	249.5	390.1	639.6
New Jersey	31.7	1.4	33.1
New York	395.5	583.1	978.6
Ohio	95.0	727.7	822.7
Pennsylvania	279.5	1,273.0	1,552.5
Rhode Island	1.1	*	1.1
Vermont	187.3	215.2	402.5
West Virginia	1,74.1	1,576.8	1,750.9
Total	3,884.8	10,222.4	14,107.2

* less than 125 green tons

Table GT3.—Softwood and hardwood pulpwood chip production from manufacturing residues in the Northeast, by state and type, 2001

State	Type		Total
	Softwood	Hardwood	
	Thousand green tons		
Maine	841.0	274.7	1,115.7
Maryland	102.4	85.5	187.9
Massachusetts	0.6	2.7	3.3
New Hampshire	220.5	172.9	393.4
New Jersey	0.0	6.4	6.4
New York	3.1	244.3	247.4
Ohio	3.7	740.1	743.8
Pennsylvania	20.5	639.7	660.2
Vermont	15.6	4.5	20.1
West Virginia	6.0	375.3	381.3
Total	1,213.4	2,546.1	3,759.5

Table GT4.—Pulpwood receipts from roundwood in the Northeast, by state and type, 2001

State	Type		Total
	Softwood	Hardwood	
	Thousand green tons		
Maine/New Hampshire[a]	2,635.4	5,293.4	7,928.8
Maryland/West Virginia[a]	260.0	1,947.5	2,207.5
New York	519.7	564.3	1,084.0
Ohio	140.3	784.1	924.4
Pennsylvania	520.0	1,271.2	1,791.2
Total	4,075.4	9,860.5	13,935.9

[a]States have been combined to avoid individual disclosure.

Table GT5.—Pulpwood chip receipts from manufacturing residues in the Northeast, by state and type, 2001

State	Type		Total
	Softwood	Hardwood	
	Thousand green tons		
Maine/New Hampshire[a]	1,207.6	567.8	1,775.4
Maryland/West Virginia[a]	24.8	277.5	302.3
New York	3.6	204.1	207.7
Ohio	12.0	982.3	994.3
Pennsylvania	106.9	771.8	878.7
Total	1,354.9	2,803.5	4,158.4

[a]States have been combined to avoid individual disclosure.

Table GT6.—Pulpwood production from roundwood in the Northeast, by state and type, 2001

State	Softwood					Total hardwoods	Total
	Spruce/Fir	Hemlock/ Tamarack	Mixed softwoods	Pine	Total softwoods		
	Thousands green tons						
Connecticut	*	6.5	0.0	0.1	6.6	1.9	8.4
Delaware	0.0	0.0	0.0	*	*	*	*
Maine	1,081.6	624.6	43.3	518.4	2,267.9	5,209.9	7,477.8
Maryland	0.0	0.0	30.8	132.8	163.6	238.8	402.4
Massachusetts	0.3	16.6	0.1	16.1	33.1	4.3	37.4
New Hampshire	100.2	43.8	5.4	100.2	249.6	390.1	639.7
New Jersey	0.0	0.0	0.0	31.7	31.7	1.3	33.0
New York	12.1	181.0	18.4	184.1	395.6	583.5	979.1
Ohio	0.0	0.0	10.1	84.9	95.0	727.7	822.7
Pennsylvania	0.0	42.6	51.1	185.9	279.6	1,273.0	1,552.6
Rhode Island	0.1	0.0	0.0	1.0	1.1	*	1.1
Vermont	50.8	44.4	5.3	86.8	187.3	215.1	402.4
West Virginia	0.0	0.0	94.4	79.8	174.2	1,576.7	1,750.9
Total	1,245.1	959.5	258.9	1,421.8	3,885.2	10,222.3	14,107.5

* less than 125 green tons

Table GT7.—Pulpwood production from roundwood in Northern New England, by county, state, and type, 2001

County	Softwood					Total hardwoods	Total all species
	Spruce/fir	Hemlock/ Tamarack	Pine	Mixed softwoods	Total softwoods		
MAINE	Thousands green tons						
Androscoggin	2.6	10.2	31.2	1.5	45.4	99.3	144.8
Aroostock	52.5	25.2	1.0	1.5	80.3	879.6	959.8
Cumberland	2.0	27.6	49.0	3.8	82.4	39.9	122.3
Franklin	73.6	35.6	18.4	3.0	130.6	422.4	553.0
Hancock	23.9	10.0	11.0	2.7	47.6	213.4	261.0
Kennebec	7.3	27.2	44.1	4.4	82.9	99.0	182.0
Knox	4.0	2.6	5.1	0.4	12.1	21.2	33.1
Lincoln	5.2	4.2	20.1	1.3	30.8	19.5	50.3
Oxford	82.5	93.8	191.5	5.1	372.8	504.8	877.7
Penobscot	115.3	55.8	23.9	6.7	201.8	830.6	1,032.3
Piscataquis	93.9	18.2	4.8	1.9	118.7	641.9	760.7
Sagadahoc	0.5	2.0	7.0	0.4	9.9	7.6	17.5
Somerset	151.0	56.4	23.4	2.5	233.3	759.6	992.9
Waldo	13.4	9.2	31.2	1.0	54.9	69.5	124.3
Washington	75.4	12.6	8.4	4.6	101.0	413.4	514.4
York	0.1	12.6	42.6	2.3	57.7	28.9	86.5
Unknown	378.5	221.6	5.7	*	605.8	159.6	765.5
Total	1,081.6	624.8	518.4	43.1	2,267.9	5,210.2	7,478.1
NEW HAMPSHIRE							
Belknap	*	*	1.1	*	1.1	8.3	9.4
Carroll	*	5.6	4.6	0.8	11.0	*	11.0
Cheshire	*	1.4	1.5	*	2.9	*	2.9
Coos	25.7	*	1.3	1.5	28.5	142.6	171.1
Grafton	1.6	1.2	3.0	0.6	6.4	5.7	12.1
Hillsborough	*	*	2.1	*	2.1	*	2.1
Merrimack	*	15.0	10.3	1.1	26.4	3.1	29.5
Rockingham	*	1.2	8.9	1.1	11.2	3.4	14.6
Stafford	*	*	6.1	*	6.1	*	6.1
Sullivan	*	1.4	39.1	0.6	41.1	6.0	47.1
Unknown	71.8	16.6	22.2	*	110.6	218.3	328.9
Total	99.1	42.4	100.2	5.7	247.4	387.4	634.8
VERMONT							
Addison	*	0.4	5.1	*	5.5	0.7	6.2
Bennington	*	0.4	3.4	*	3.8	10.7	14.5
Caledonia	7.7	2.0	9.1	1.1	19.9	6.3	26.2
Chittenden	*	0.9	1.0	*	1.9	0.8	2.7
Essex	5.8	0.8	0.8	0.4	7.8	71.1	78.9
Franklin	0.2	5.6	6.8	*	12.6	2.0	14.6
Grand Isle	*	*	*	*	*	*	*
Lamoille	0.9	2.8	3.4	0.4	7.5	3.3	10.8
Orange	1.1	3.8	6.3	1.9	13.1	1.9	15.0
Orleans	7.6	9.8	2.9	0.4	20.7	7.2	27.9
Rutland	*	2.0	12.4	*	14.4	2.8	17.2
Washington	1.3	2.0	6.5	1.0	10.8	2.2	13.0
Windham	0.2	1.6	7.6	*	9.4	2.3	11.7
Windsor	0.2	2.2	5.3	0.2	7.9	0.3	8.2
Unknown	26.0	12.8	15.8	*	54.6	104.1	158.7
Total	51.0	46.7	86.4	5.4	189.9	215.7	405.6

*less than 125 green tons. Counties with no reported production are not listed.

Table GT8.—Pulpwood production from roundwood in southern New England, by state, county and type, 2001

County	Softwood					Total hardwoods	Total all species
	Spruce/ fir	Hemlock/ Tamarack	Pine	Mixed softwoods	Total softwoods		
CONNECTICUT	Thousand green tons						
Fairfield	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hartford	0.0	2.6	0.0	0.0	2.6	0.0	2.6
Litchfield	0.0	0.2	0.0	0.0	0.2	0.0	0.2
New Haven	0.0	0.2	0.0	0.0	0.2	0.0	0.2
Tolland	0.0	0.2	0.0	0.0	0.2	0.0	0.2
Windham	0.0	0.2	0.0	0.0	0.2	0.0	0.2
New London	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown	*	3.2	*	0.0	3.2	1.8	5.0
Total	*	6.6	*	0.0	6.6	1.8	8.4
MASSACHUSETTS							
Berkshire	0.0	1.2	*	0.0	1.2	0.0	1.2
Essex	0.0	0.0	*	0.0	0.0	*	*
Franklin	0.0	0.8	0.0	0.0	0.8	*	0.8
Hampden	0.0	8.2	0.0	0.0	8.2	*	8.2
Worchester	*	0.6	16.0	*	16.6	0.2	16.8
Unknown	0.2	5.8	0.8	0.0	6.8	0.0	6.8
Total	0.2	16.6	16.8	0.0	33.6	0.2	33.8
RHODE ISLAND							
Unknown	*	0.0	1.0	0.0	0.1	*	1.1
Total	*	0.0	1.0	0.0	0.1	*	1.1

* less than 125 green tons. Counties with no reported production are not listed.

Table GT9.—Pulpwood production from roundwood in New York, by county and type, 2001

County	Softwood					Total hardwoods	Total all species
	Spruce/fir	Hemlock/ Tamarack	Pine	Mixed softwoods	Total softwoods		
	Thousand green tons						
Albany	0.0	0.4	1.3	0.0	1.7	0.5	2.2
Allegheny	0.0	0.0	0.0	2.7	2.7	0.0	2.7
Broome	*	2.6	8.6	0.0	11.2	2.3	13.5
Cattaraugus	0.0	0.0	0.0	15.8	15.8	9.8	25.6
Chautauqua	0.0	0.0	0.0	0.0	0.0	2.6	2.6
Chemung	0.0	0.8	2.1	0.0	2.9	2.0	4.9
Chenango	0.2	4.0	*	0.0	4.2	0.0	4.2
Clinton	0.0	4.6	10.1	0.0	14.7	33.7	48.4
Columbia	0.0	0.2	*	0.0	0.2	0.5	0.7
Cortland	0.0	*	0.0	0.0	*	1.4	1.4
Delaware	0.0	3.2	1.3	0.0	4.5	29.4	33.9
Dutchess	*	0.0	0.0	0.0	*	0.0	*
Essex	5.2	26.4	31.7	0.0	63.3	73.6	136.9
Franklin	0.7	7.8	14.8	0.0	23.3	54.7	78.0
Fulton	0.2	15.0	12.0	0.0	27.2	14.3	41.5
Greene	0.0	1.0	0.6	0.0	1.6	0.3	1.9
Hamilton	1.8	5.8	1.0	0.0	8.6	49.4	58.0
Herkimer	0.4	4.4	1.0	0.0	5.8	7.3	13.1
Jefferson	*	3.0	0.4	0.0	3.4	0.3	3.7
Lewis	0.7	9.2	1.7	0.0	11.6	3.6	15.2
Madison	0.0	0.2	0.0	0.0	0.2	0.0	0.2
Monroe	0.0	0.2	0.6	0.0	0.8	0.3	1.1
Montgomery	0.0	0.2	0.0	0.0	0.2	0.5	0.7
Oneida	*	2.0	0.4	0.0	2.4	5.7	8.1
Onondaga	0.0	0.2	0.0	0.0	0.2	0.0	0.2
Oswego	*	12.2	0.2	0.0	12.4	0.0	12.4
Otsego	0.2	2.8	1.1	0.0	4.1	0.5	4.6
Rensselaer	0.4	6.4	14.3	0.0	21.1	21.3	42.4
Rockland	0.0	*	0.0	0.0	0.0	0.0	0.0
Saratoga	0.4	12.6	29.6	0.0	42.6	45.9	88.5
Schenectady	0.0	0.0	*	0.0	*	0.0	*
Schohairie	0.0	1.8	0.2	0.0	2.0	0.0	2.0
St.Lawrence	0.9	18.4	11.6	0.0	30.9	163.0	193.9
Steuben	0.0	3.0	2.1	0.0	5.1	0.5	5.6
Sullivan	0.0	1.4	0.0	0.0	1.4	0.0	1.4
Tioga	0.0	0.0	0.2	0.0	0.2	3.1	3.3
Tompkins	0.0	0.0	7.4	0.0	7.4	0.0	7.4
Ulster	0.0	0.4	0.0	0.0	0.4	0.0	0.4
Warren	0.9	16.2	20.7	0.0	37.8	26.8	64.6
Washington	0.0	15.0	8.0	0.0	23.0	25.3	48.3
Wayne	0.0	0.0	0.0	0.0	0.0	1.8	1.8
Unknown	0.0	0.0	0.2	0.0	0.2	1.9	2.1
Total	12.0	181.4	183.2	18.5	395.1	582.3	977.4

* less than 125 green tons. Counties with no reported production are not listed.

Table GT10.—Pulpwood production from roundwood in Delaware, Maryland, and New Jersey, by county and type, 2001

County	Softwood			Total	Total
	Pine	Mixed Softwoods	Total Softwood	Hardwoods	all Species
DELAWARE	Thousand green tons				
Kent	*	0.0	*	*	*
New Castle	0.0	0.0	0.0	*	*
Unknown	0.0	0.0	0.0	*	*
Total	0.0	0.0	*	*	*
MARYLAND					
Allegheny	1.3	1.7	3.0	52.3	55.3
Anne Arundel	5.7	*	5.7	14.8	20.5
Baltimore	0.8	*	0.8	15.3	16.1
Calvert	0.8	1.0	1.8	1.8	3.6
Carroll	0.8	0.0	0.8	3.4	4.2
Cecil	0.2	1.1	1.3	0.3	1.6
Charles	16.5	0.0	16.5	7.8	24.3
Dorchester	0.0	0.6	0.6	3.1	3.7
Frederick	2.1	0.0	2.1	18.0	20.1
Garrett	0.0	5.7	5.7	85.8	91.5
Harford	0.2	0.0	0.2	2.8	3.0
Howard	0.4	0.0	0.4	1.6	2.0
Montgomery	0.2	0.0	0.2	1.7	1.9
Prince Georges	0.4	0.0	0.4	2.2	2.6
Queen Annes	*	0.0	*	0.0	*
St. Marys	11.8	17.7	29.5	11.1	40.6
Washington	0.0	2.9	2.9	4.7	7.6
Wicomico	91.8	0.0	91.8	11.2	103.0
Unknown	0.0	0.0	0.0	0.0	0.0
Total	133.0	30.7	163.7	237.9	401.6
NEW JERSEY					
Atlantic	2.4	0.0	2.4	0.1	2.5
Camden	12.5	0.0	12.5	1.2	13.7
Cape May	0.8	0.0	0.8	0.0	0.8
Gloucester	0.1	0.0	0.1	0.0	0.1
Mercer	0.2	0.0	0.2	0.0	0.2
Ocean	11.6	0.0	11.6	0.0	11.6
Warren	4.2	0.0	4.2	0.0	4.2
Total	31.8	0.0	31.8	1.3	33.1

* less than 125 green tons. Counties with no reported production are not listed.

Table GT11.—Pulpwood production from roundwood in Pennsylvania, by county and type, 2001

County	Softwood				Total hardwoods	Total all species
	Hemlock/ Tamarack	Pine	Mixed softwoods	Total softwoods		
	Thousand green tons					
Adams	0.0	5.7	1.0	6.7	18.8	25.5
Allegheny	0.0	0.0	0.0	0.0	14.3	14.3
Bedford	0.0	4.6	10.1	14.7	43.2	57.9
Berks	0.0	1.0	0.0	1.0	8.4	9.4
Blair	0.0	0.2	2.3	2.5	6.3	8.8
Bradford	0.8	1.3	0.0	2.1	6.3	8.4
Bucks	0.0	*	0.0	*	0.0	*
Cambria	2.0	2.1	2.1	6.2	10.0	16.2
Cameron	0.8	0.6	0.0	1.4	0.0	1.4
Carbon	0.0	0.2	0.0	0.2	0.3	0.5
Centre	1.0	7.4	0.2	8.6	16.4	25.0
Chester	0.0	0.4	0.0	0.4	0.0	0.4
Clearfield	7.8	9.7	8.0	25.5	87.3	112.8
Clinton	0.8	2.3	0.4	3.5	3.7	7.2
Columbia	0.0	1.1	0.0	1.1	2.9	4.0
Crawford	0.0	0.0	0.0	0.0	70.0	70.0
Cumberland	0.0	1.5	0.0	1.5	7.5	9.0
Dauphin	0.0	1.9	0.0	1.9	21.1	23.0
Delaware	0.0	0.2	0.0	0.2	2.8	3.0
Elk	3.8	3.4	0.0	7.2	57.1	64.3
Erie	0.0	0.0	0.0	0.0	2.6	2.6
Fayette	0.0	*	0.0	*	10.9	10.9
Forest	2.4	1.5	0.0	3.9	49.2	53.1
Franklin	0.0	1.0	0.0	1.0	27.2	28.2
Fulton	0.0	10.3	6.5	16.8	18.8	35.6
Greene	0.0	*	0.0	*	12.7	12.7
Huntington	0.0	15.8	1.0	16.8	38.2	55.0
Indiana	1.0	1.0	2.0	4.0	11.6	15.6
Jefferson	6.8	5.5	0.0	12.3	26.2	38.5
Juniata	0.0	12.4	0.0	12.4	14.6	27.0
Lackawanna	0.4	*	0.0	0.4	15.4	15.8
Lancaster	0.0	*	0.0	*	3.4	3.4
Lawrence	0.0	0.0	0.0	0.0	0.8	0.8
Lebanon	0.0	0.2	0.0	0.2	3.6	3.8
Lehigh	0.0	0.0	0.0	0.0	4.2	4.2
Luzerine	0.6	1.0	0.0	1.6	3.2	4.8
Lycoming	1.2	7.2	0.0	8.4	7.6	16.0
McKean	0.8	0.6	0.0	1.4	49.2	50.6
Mercer	0.0	4.8	0.4	5.2	19.0	24.2
Mifflin	0.0	1.7	0.0	1.7	20.1	21.8
Monroe	0.0	0.0	0.0	0.0	2.4	2.4
Montgomery	0.0	*	0.0	*	0.0	*
Montour	0.0	2.1	0.0	2.1	0.0	2.1
Northcumberland	0.0	0.4	0.0	0.4	6.7	7.1
Perry	0.0	7.4	0.0	7.4	2.9	10.3

Continued

Table GT11.—Continued

County	Softwood				Total hardwoods	Total all species
	Hemlock/ Tamarack	Pine	Mixed softwoods	Total softwoods		
	Thousand green tons					
Pike	0.0	0.2	0.0	0.2	2.5	2.7
Potter	0.0	0.0	0.0	0.0	14.6	14.6
Schuylkill	0.0	3.6	0.0	3.6	89.9	93.5
Snyder	0.0	0.8	0.0	0.8	3.9	4.7
Somerset	0.0	0.8	1.5	2.3	72.8	75.1
Sullivan	1.2	13.1	0.0	14.3	26.8	41.1
Susquehanna	0.8	0.6	0.0	1.4	6.0	7.4
Tioga	0.0	6.3	0.0	6.3	21.5	27.8
Union	0.0	1.3	0.0	1.3	0.8	2.1
Warren	0.8	0.6	0.0	1.4	16.7	18.1
Washington	0.0	*	2.0	2.0	7.8	9.8
Wayne	1.6	*	0.0	1.6	12.5	14.1
Westmoreland	0.0	0.0	0.0	0.0	8.1	8.1
Wyoming	0.6	4.4	0.0	5.0	13.3	18.3
York	0.0	4.2	0.0	4.2	17.4	21.6
Unknown	7.8	34.0	9.3	51.1	234.3	285.4
Total	43.0	186.4	46.8.8	276.2	1,275.8	1,552.0

* less than 125 green tons. Counties with no reported production are not listed.

Table GT12.—Pulpwood production from roundwood in West Virginia, by county and type, 2001

County	Softwood			Total hardwoods	Total all species
	Pine	Mixed softwoods	Total softwoods		
	Thousand green tons				
Barbour	*	*	*	31.7	31.7
Berkeley	0.0	5.1	5.1	13.8	18.9
Boone	1.5	0.0	1.5	16.9	18.4
Braxton	0.6	0.0	0.6	13.8	14.4
Cabell	1.7	0.2	1.9	2.3	4.2
Calhoun	1.5	0.0	1.5	8.3	9.8
Clay	0.0	0.0	0.0	9.9	9.9
Doddridge	1.5	0.0	1.5	17.9	19.4
Fayette	0.0	0.0	0.0	3.9	3.9
Gilmer	0.0	0.0	0.0	6.0	6.0
Grant	0.4	0.6	1.0	35.6	36.6
Greenbrier	0.0	0.0	0.0	6.0	6.0
Hampshire	0.0	17.3	17.3	38.0	55.3
Hancock	0.0	0.0	0.0	6.8	6.8
Hardy	0.0	12.4	12.4	33.5	45.9
Harrison	*	0.0	*	25.7	25.7
Jackson	4.8	4.9	9.7	6.0	15.7
Kanawha	2.1	*	2.1	10.1	12.2
Lewis	0.8	0.0	0.8	29.4	30.2
Lincoln	1.7	0.0	1.7	8.1	9.8
Logan	0.0	0.0	0.0	11.4	11.4
Marion	*	*	*	32.0	32.0
Marshall	0.0	0.0	0.0	1.6	1.6
Mason	5.5	2.9	8.4	9.9	18.3
McDowell	0.0	0.0	0.0	5.7	5.7
Mineral	0.0	6.5	6.5	36.4	42.9
Mingo	0.0	0.0	0.0	0.0	0.0
Monongalia	0.2	0.0	0.2	31.7	31.9
Morgan	0.0	9.7	9.7	17.7	27.4
Nicholas	1.5	0.0	1.5	28.3	29.8
Ohio	0.0	0.0	0.0	8.8	8.8
Pendleton	0.0	0.2	0.2	6.8	7.0
Pleasant	*	2.1	2.1	1.8	3.9
Pocahontas	0.6	0.0	0.6	29.9	30.5
Preston	1.1	0.8	1.9	78.3	80.2
Putnam	7.4	2.3	9.7	12.5	22.2
Raleigh	0.0	0.0	0.0	8.8	8.8
Randolph	0.4	2.9	3.3	161.7	165.0
Ritchie	5.7	7.2	12.9	20.5	33.4
Roane	0.4	*	0.4	3.9	4.3
Taylor	0.8	0.0	0.8	11.2	12.0
Tucker	0.0	0.2	0.2	47.3	47.5
Tyler	0.8	0.0	0.8	5.5	6.3
Upshur	*	0.0	*	41.1	41.1
Wayne	0.0	0.0	0.0	*	*
Webster	0.8	0.0	0.8	39.3	40.1
Wetzel	0.0	0.0	0.0	13.0	13.0
Wirt	2.1	10.0	12.1	9.9	22.0
Wood	5.7	9.3	15.0	7.8	22.8
Wyoming	0.0	0.0	0.0	1.0	1.0
Unknown	30.0	0.0	30.0	570.0	600.0
Total	79.6	94.6	174.2	1577.5	1751.7

* less than 125 green tons. Counties with no reported production are not listed.

Table GT13.—Pulpwood production from roundwood in Ohio, by county and type, 2001

County	Softwood			Total hardwoods	Total all species
	Pine	Mixed softwoods	Total softwoods		
	Thousand green tons				
Adams	0.4	0.0	0.4	4.9	5.3
Ashland	0.0	0.0	0.0	2.6	2.6
Ashtabula	0.0	0.0	0.0	0.3	0.3
Athens	0.6	0.0	0.6	4.4	5.0
Belmont	5.1	0.0	5.1	21.1	26.2
Carroll	0.8	0.0	0.8	3.4	4.2
Clermont	0.4	0.0	0.4	2.3	2.7
Clinton	0.4	0.0	0.4	2.1	2.5
Columbiana	0.0	0.0	0.0	0.5	0.5
Coshocton	6.5	0.0	6.5	21.1	27.6
Cuyahoga	0.0	0.0	0.0	23.7	23.7
Delaware	0.0	0.0	0.0	1.3	1.3
Erie	0.0	0.0	0.0	0.3	0.3
Fairfield	0.4	0.0	0.4	4.7	5.1
Franklin	0.0	0.0	0.0	7.0	7.0
Fulton	10.1	0.0	10.1	2.1	12.2
Gallia	4.6	2.5	7.1	22.4	29.5
Geauga	0.0	0.0	0.0	4.7	4.7
Guernsey	0.0	0.0	0.0	8.8	8.8
Hamilton	0.4	0.0	0.4	4.9	5.3
Hardin	0.0	0.0	0.0	*	*
Harrison	0.8	0.0	0.8	12.7	13.5
Highland	0.6	0.0	0.6	7.5	8.1
Hocking	1.9	0.0	1.9	13.5	15.4
Holmes	0.0	0.0	0.0	0.8	0.8
Huron	0.0	0.0	0.0	4.9	4.9
Jackson	8.2	0.0	8.2	74.9	83.1
Jefferson	0.0	0.0	0.0	2.3	2.3
Knox	0.0	0.0	0.0	*	*
Lake	0.0	0.0	0.0	7.8	7.8
Lawrence	3.0	0.0	3.0	37.4	40.4
Licking	8.2	0.0	8.2	4.9	13.1
Lorain	0.0	0.0	0.0	8.6	8.6
Lucas	0.0	0.0	0.0	1.3	1.3
Madison	0.4	0.0	0.4	2.1	2.5
Mahoning	0.0	0.0	0.0	2.1	2.1
Medina	0.0	0.0	0.0	10.7	10.7
Meigs	0.8	7.0	7.8	13.6	21.4
Monroe	0.0	0.0	0.0	*	*
Montgomery	0.4	0.0	0.4	4.9	5.3
Morgan	1.0	0.0	1.0	4.2	5.2
Morrow	0.0	0.0	0.0	0.3	0.3
Muskingum	3.6	0.0	3.6	0.8	4.4
Noble	0.0	0.0	0.0	17.4	17.4
Perry	0.6	0.0	0.6	9.9	10.5

Continued

Table GT13.—Continued

County	Softwood			Total hardwoods	Total all species
	Pine	Mixed softwoods	Total softwoods		
	Thousand green tons				
Pickaway	0.6	0.0	0.6	14.6	15.2
Pike	4.6	0.0	4.6	46.0	50.6
Portage	0.0	0.0	0.0	4.9	4.9
Richland	0.0	0.0	0.0	1.6	1.6
Ross	0.8	0.0	0.8	46.8	47.6
Sandusky	0.0	0.0	0.0	*	*
Scioto	5.1	0.2	5.3	51.5	56.8
Stark	0.0	0.0	0.0	12.7	12.7
Summit	0.8	0.0	0.8	14.6	15.4
Trumbull	0.0	0.0	0.0	28.1	28.1
Tuscarawas	0.8	0.0	0.8	22.6	23.4
Vinton	5.3	*	5.3	47.6	52.9
Warren	1.1	0.0	1.1	4.4	5.5
Washington	7.2	0.2	7.4	11.2	18.6
Wayne	0.0	0.0	0.0	3.9	3.9
Unknown	0.0	0.2	0.2	32.0	32.2
Total	85.5	10.1	95.6	727.7	823.3

* less than 125 green tons. Counties with no reported production are not listed.

Table GT14.—Production and receipts of roundwood in the Northeast, by state and type, 2001

State	Produced in State		Received in State	
	Softwood	Hardwood	Softwood	Hardwood
	Thousand green tons			
Connecticut	6.6	1.9	*	*
Delaware	*	*	*	*
Maine	2,170.1	5,210.2	2,586.2	4,885.3
Maryland	163.5	238.7	195.2	601.2
Massachusetts	33.1	4.3	0.0	0.0
New Hampshire	249.5	390.1	49.2	408.1
New Jersey	31.7	1.4	0.0	0.0
New York	395.5	583.1	519.7	564.3
Ohio	95.0	727.7	140.3	784.1
Pennsylvania	279.5	1,273.0	520.0	1,271.2
Rhode Island	1.1	*	0.0	0.0
Vermont	187.3	215.2	0.0	0.0
West Virginia	174.1	1,576.8	64.8	1,346.3
Totals	3,787.0	10,222.4	4,075.4	9,860.5

* less than 125 green tons

Table GT15.—Balance of pulpwood roundwood and residue shipments into and out of states, 2001

State	Production	Receipts	Net [a]
	Thousand green tons		
Connecticut	8.5	0.0	8.5
Delaware	*	0.0	*
Maine	8,593.9	9103.3	-509.4
Maryland	590.1	1,090.9	-500.8
Massachusetts	40.7	0.0	40.7
New Hampshire	1,033.0	600.9	432.1
New Jersey	39.5	0.0	39.5
New York	1,226.1	1,291.7	-65.6
Ohio	1,566.4	1,918.7	-352.3
Pennsylvania	2,212.7	2,669.9	-457.2
Rhode Island	1.1	0.0	1.1
Vermont	422.6	0.0	422.6
West Virginia	2,132.2	1,418.9	713.3
Total	17,866.8	19,523.4	-226.6

*less than 125 green tons

[a]negative values indicate a net importing state, positive values a net exporting state

Table GT16.—Imports of roundwood into the Northeast, by state (or province) of origin, state of consumption, and type, 2001

Receiving State	State/Province of origin	Softwood					Hardwood				Total Imports
		Hemlock& Tamarack	Mixed softwoods	Pine	Spruce& Fir	Softwood Totals	Aspen & Yellow-Poplar	Oak & Hickory	Other Hardwoods	Hardwood Totals	
		Thousand green tons									
Maine	Canada	20.1	0.4	0.4	170.6	191.5	366.6	0.0	634.0	1,000.6	1,192.1
New York	Canada	31.4	0.0	5.9	0.4	37.7	0.0	0.0	1.0	1.0	38.7
Ohio	Kentucky	0.0	0.0	29.5	0.0	29.5	0.0	0.0	63.4	63.4	92.9
Pennsylvania	Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	11.7	11.7
	Virginia	0.0	0.0	103.6	0.0	103.6	0.0	14.0	0.3	14.3	117.9
West Virginia	Kentucky	0.0	0.0	1.0	0.0	1.0	0.0	0.0	17.9	17.9	18.9
	Virginia	0.0	0.0	3.4	0.0	3.4	0.0	0.0	32.5	32.5	35.9
Total		51.5	0.4	143.8	171.0	366.7	366.6	14.0	760.8	1,141.4	1,508.1

Table GT17.—Source of imports of manufacturing residues, by state and type, 2001

To	From	Residue type								Total
		Softwood				Hardwood				
		Chips	Sawdust	Other	Total	Chips	Sawdust	Other	Total	
		Thousand green tons								
Maine	New Brunswick	0.0	0.0	0.0	0.0	88.1	0.0	0.3	88.3	88.2
	Quebec	54.4	0.0	0.0	54.4	25.5	0.0	0.0	35.7	79.9
	Canada	0.0	75.6	0.0	75.6	3.8	0.0	0.0	4.0	79.4
New York	Canada	0.6	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.6
Ohio	Indiana	0.0	0.0	0.0	0.0	12.2	0.0	0.0	12.2	12.2
	Kentucky	6.4	0.0	0.0	6.4	67.5	57.2	0.0	124.7	131.1
	Tennessee	1.8	0.0	0.0	1.8	0.0	0.0	0.0		1.8
Pennsylvania	Canada	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.5
	Virginia	2.6	0.0	0.0	2.6	21.2	0.0	0.0	21.2	23.8
Total		101.2	75.6	0.0	141.4	218.8	4.0	0.3	276.1	417.5

Table GT18.—Exports from the Northeastern region by state to other states and Canada, 2001

From	To							
	Alabama		Kentucky		Louisiana		North Carolina	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Thousand green tons							
Connecticut	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delaware	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Massachusetts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maryland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Hampshire	0.0	26.0	0.0	0.0	0.0	0.0	0.0	0.0
New Jersey	0.0	0.0	0.0	0.0	0.0	33.0	0.0	0.0
New York	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ohio	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.0
Pennsylvania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rhode Island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vermont	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
West Virginia	0.0	0.0	0.0	0.8	0.0	0.0	0.0	380.8
Total	0.0	26.0	0.0	6.6	0.0	33.0	0.0	380.8

Table GT18 (continued).—Exports from the Northeastern region by state to other states and Canada, 2001

From	To							
	South Carolina		Virginia		Canada		Total	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Thousand green tons							
Connecticut	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delaware	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Massachusetts	0.0	0.0	0.0	0.0	3.5	0.0	3.5	0.0
Maryland	0.0	0.0	48.3	88.5	0.0	0.0	48.3	88.5
Maine	0.0	0.0	0.0	0.0	1389.0	142.0	1389.0	142.0
New Hampshire	0.0	84.0	0.0	0.0	21.0	1.0	21.0	111.0
New Jersey	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.0
New York	0.0	0.0	0.0	0.0	71.3	89.3	71.3	89.3
Ohio	0.0	0.0	0.0	63.0	0.0	0.0	0.0	77.5
Pennsylvania	0.0	0.0	0.0	0.0	2.3	0.6	2.3	1.5
Rhode Island	0.0	0.0	0.0	0.0	*	0.0	0.0	0.0
Vermont	0.0	0.0	0.0	0.0	194.8	100.9	194.8	252.3
West Virginia	0.0	0.0	10.0	390.5	*	1.5	10.0	774.8
Total	0.0	84.0	58.3	542.0	1681.8	487.5	1740.0	1569.8

* less than 125 green tons

Table GT19.—Estimated average annual pulpwood roundwood removals per acre of timberland in the Northeast, 2001

State	Acres of timberland (Thousand acres)	Pulpwood harvest (Thousand green tons)	Removals/ acre (Green tons)
Connecticut	1,815	10.0	0.006
Delaware	376	*	**
Maine	16,952	8,275.5	0.488
Maryland	2,423	441.0	0.182
Massachusetts	2,965	46.8	0.016
New Hampshire	4,551	714.5	0.157
New Jersey	1,864	43.0	0.023
New York	15,406	1,073.5	0.070
Ohio	7,568	824.5	0.109
Pennsylvania	15,853	1,581.8	0.100
Rhode Island	356	1.5	0.004
Vermont	4,461	461.3	0.103
West Virginia	11,900	1830.3	0.154
Total	86,491	15,303.7	0.177

* less than 125 green tons
**less than 0.0003 green tons / acre

Baker, Iris C.; Hansen, Bruce G.; Akers, Melody S. 2005. **Pulpwood production and consumption in the Northeast—2001.** Resour. Bull. NE-162. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. 40 p.

This study reports a decrease in pulpwood production by more than 18 percent in the 13 Northeastern states from 1997 to 2001. Pulp production comprised 6.1 million cords of roundwood and almost 1.7 million cords of wood fiber from mill residues. Consumption of pulpwood at mills in the Northeast declined about 7.5 percent during the same period, to 8.8 million cords. Harvesting of trees (roundwood) for pulp was most intense in Maine, where an average 16.6 ft^3 of wood was harvested per acre of timberland in 2001.

Keywords: residue, timber output, harvest

Headquarters of the Northeastern Research Station is in Newtown Square, Pennsylvania. Field laboratories are maintained at:

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